

CLAIMS

Now, therefore, at least the following is claimed:

- 1 1. A system for automatically cropping graphical images, comprising:
2 memory for storing digital data that defines a graphical image;
3 an object detector configured to analyze said digital data and to automatically
4 identify a portion of said digital data that defines an image of an object within said
5 graphical image; and
6 an image cropper configured to automatically crop said digital data based on a
7 position of said object image within said graphical image, said image cropper
8 configured to determine said position of said object image within said graphical image
9 based on said portion automatically identified by said object detector.
- 1 2. The system of claim 1, wherein said object image is an image of a
2 person's face, and wherein said object detector is configured to search said digital data
3 for portions that define facial images.
- 1 3. The system of claim 1, wherein said image cropper is configured to
2 crop said digital data based on a size of said object image.
- 1 4. The system of claim 1, wherein said image cropper is configured to
2 crop said digital data based on said position of said object image such that said object
3 image is substantially centered between two edges of said graphical image.

1 5. The system of claim 1, wherein said image cropper is configured to
2 crop said digital data based on said position of said object image such that said portion
3 is removed from said digital data that defines said graphical image.

1 6. The system of claim 1, further comprising:
2 an input device for receiving an input from a user; and
3 a system manager configured to enable said image cropper based on said user
4 input.

1 7. The system of claim 1, further comprising an image capturing device
2 configured to receive an image of a scene and to produce said digital data based on
3 said image received by said image capturing device.

1 8. The system of claim 7, wherein said image capturing device includes a
2 lens for receiving said image of said scene and an image converter for producing said
3 digital data based on said image of said scene.

1 9. A system for automatically cropping graphical images, comprising:
2 memory for storing digital data that defines a graphical image;
3 means for automatically identifying a portion of said digital data that defines
4 an image of an object within said graphical image; and
5 means for automatically cropping said digital data based on a position of said
6 object image within said graphical image, said cropping means configured to
7 determine said position of said object image within said graphical image based on said
8 portion automatically identified by said identifying means.

1 10. The system of claim 9, wherein said object image is an image of a
2 person's face, and wherein said identifying means is configured to search said digital
3 data for portions that define facial images.

1 11. The system of claim 9, wherein said cropping means is configured to
2 crop said digital data based on a size of said object image.

1 12. The system of claim 9, wherein said cropping means crops said digital
2 data based on said position of said object image such that said object image is
3 substantially centered between two edges of said graphical image.

1 13. The system of claim 9, wherein said cropping means crops said digital
2 data based on said position of said object image such that said portion is removed
3 from said digital data that defines said graphical image.

1 14. The system of claim 9, further comprising:
2 means for receiving an input from a user; and
3 means for enabling said cropping means based on said user input.

1 15. The system of claim 9, further comprising a means for receiving an
2 image of a scene and for producing said digital data based on said image received by
3 said receiving means.

1 16. A method for automatically cropping graphical images, comprising the
2 steps of:
3 storing digital data that defines a graphical image;
4 automatically searching said digital data for a portion of said digital data that
5 defines an image of a particular object;
6 identifying said portion based on said searching step;
7 determining, based on said identified portion, a position of said object image
8 within said graphical image; and
9 automatically cropping said digital data based on said position of said object
10 image.

1 17. The method of claim 16, wherein said particular object is a person's
2 face.

1 18. The method of claim 16, wherein said cropping step is further based on
2 a size of said object image.

1 19. The method of claim 16, further comprising the step of:
2 substantially centering said object image between two edges of said graphical
3 image via said cropping step.

1 20. The method of claim 16, further comprising the step of:
2 removing, via said cropping step, said portion from said digital data that
3 defines said graphical image.

1 21. The method of claim 16, wherein said searching and cropping steps are
2 automatically performed in response to said storing step.

1 22. The method of claim 16, further comprising the steps of:
2 receiving an input from a user; and
3 enabling said cropping step based on said user input.